

STANDARD BIBLIOGRAPHY OF SEL LITERATURE

The technical papers, memorandums, and documents listed in this bibliography are organized into two groups. The first group is composed of documents issued by the Software Engineering Laboratory (SEL) during its research and development activities. The second group includes materials that were published elsewhere but pertain to SEL activities. The *Annotated Bibliography of Software Engineering Laboratory Literature* contains an abstract for each document and is available via the SEL Products Page at <http://fdd.gsfc.nasa.gov/selprods.html>.

SEL-ORIGINATED DOCUMENTS

SEL-76-001, *Proceedings From the First Summer Software Engineering Workshop*, August 1976

SEL-77-002, *Proceedings From the Second Summer Software Engineering Workshop*, September 1977

SEL-78-005, *Proceedings From the Third Summer Software Engineering Workshop*, September 1978

SEL-78-006, *GSFC Software Engineering Research Requirements Analysis Study*, P. A. Scheffer and C. E. Velez, November 1978

SEL-78-007, *Applicability of the Rayleigh Curve to the SEL Environment*, T. E. Mapp, December 1978

SEL-78-302, *FORTTRAN Static Source Code Analyzer Program (SAP) User's Guide (Revision 3)*, W. J. Decker, W. A. Taylor, et al., July 1986

SEL-79-002, *The Software Engineering Laboratory: Relationship Equations*, K. Freburger and V. R. Basili, May 1979

SEL-79-004, *Evaluation of the Caine, Farber, and Gordon Program Design Language (PDL) in the Goddard Space Flight Center (GSFC) Code 580 Software Design Environment*, C. E. Goorevich, A. L. Green, and W. J. Decker, September 1979

SEL-79-005, *Proceedings From the Fourth Summer Software Engineering Workshop*, November 1979

SEL-80-002, *Multi-Level Expression Design Language-Requirement Level (MEDL-R) System Evaluation*, W. J. Decker and C. E. Goorevich, May 1980

SEL-80-005, *A Study of the Musa Reliability Model*, A. M. Miller, November 1980

SEL-80-006, *Proceedings From the Fifth Annual Software Engineering Workshop*, November 1980

SEL-80-007, *An Appraisal of Selected Cost/Resource Estimation Models for Software Systems*, J. F. Cook and F. E. McGarry, December 1980

SEL-80-008, *Tutorial on Models and Metrics for Software Management and Engineering*, V. R. Basili, 1980

SEL-81-011, *Evaluating Software Development by Analysis of Change Data*, D. M. Weiss, November 1981

SEL-81-012, *The Rayleigh Curve as a Model for Effort Distribution Over the Life of Medium Scale Software Systems*, G. O. Picasso, December 1981

SEL-81-013, *Proceedings of the Sixth Annual Software Engineering Workshop*, December 1981

SEL-81-014, *Automated Collection of Software Engineering Data in the Software Engineering Laboratory (SEL)*, A. L. Green, W. J. Decker, and F. E. McGarry, September 1981

SEL-81-101, *Guide to Data Collection*, V. E. Church, D. N. Card, F. E. McGarry, et al., August 1982

SEL-81-110, *Evaluation of an Independent Verification and Validation (IV&V) Methodology for Flight Dynamics*, G. Page, F. E. McGarry, and D. N. Card, June 1985

SEL-81-305, *Recommended Approach to Software Development*, L. Landis, S. Waligora, F. E. McGarry, et al., June 1992

SEL-81-305SP1, *Ada Developers' Supplement to the Recommended Approach*, R. Kester and L. Landis, November 1993

SEL-82-001, *Evaluation of Management Measures of Software Development*, G. Page, D. N. Card, and F. E. McGarry, September 1982, vols. 1 and 2

SEL-82-004, *Collected Software Engineering Papers: Volume 1*, July 1982

SEL-82-007, *Proceedings of the Seventh Annual Software Engineering Workshop*, December 1982

SEL-82-008, *Evaluating Software Development by Analysis of Changes: The Data From the Software Engineering Laboratory*, V. R. Basili and D. M. Weiss, December 1982

SEL-82-102, *FORTTRAN Static Source Code Analyzer Program (SAP) System Description (Revision 1)*, W. A. Taylor and W. J. Decker, April 1985

SEL-82-105, *Glossary of Software Engineering Laboratory Terms*, T. A. Babst, M. G. Rohleder, and F. E. McGarry, October 1983

SEL-83-001, *An Approach to Software Cost Estimation*, F. E. McGarry, G. Page, D. N. Card, et al., February 1984

SEL-83-002, *Measures and Metrics for Software Development*, D. N. Card, F. E. McGarry, G. Page, et al., March 1984

SEL-83-003, *Collected Software Engineering Papers: Volume II*, November 1983

SEL-83-007, *Proceedings of the Eighth Annual Software Engineering Workshop*, November 1983

SEL-83-106, *Monitoring Software Development Through Dynamic Variables (Revision 1)*, C. W. Doerflinger, November 1989

SEL-84-003, *Investigation of Specification Measures for the Software Engineering Laboratory (SEL)*, W. W. Agresti, V. E. Church, and F. E. McGarry, December 1984

SEL-84-004, *Proceedings of the Ninth Annual Software Engineering Workshop*, November 1984

SEL-84-101, *Manager's Handbook for Software Development (Revision 1)*, L. Landis, F. E. McGarry, S. Waligora, et al., November 1990

SEL-85-001, *A Comparison of Software Verification Techniques*, D. N. Card, R. W. Selby, Jr., F. E. McGarry, et al., April 1985

SEL-85-002, *Ada Training Evaluation and Recommendations From the Gamma Ray Observatory Ada Development Team*, R. Murphy and M. Stark, October 1985

SEL-85-003, *Collected Software Engineering Papers: Volume III*, November 1985

SEL-85-004, *Evaluations of Software Technologies: Testing, CLEANROOM, and Metrics*, R. W. Selby, Jr., and V. R. Basili, May 1985

SEL-85-005, *Software Verification and Testing*, D. N. Card, E. Edwards, F. McGarry, and C. Antle, December 1985

SEL-85-006, *Proceedings of the Tenth Annual Software Engineering Workshop*, December 1985

SEL-86-001, *Programmer's Handbook for Flight Dynamics Software Development*, R. Wood and E. Edwards, March 1986

SEL-86-002, *General Object-Oriented Software Development*, E. Seidewitz and M. Stark, August 1986

SEL-86-003, *Flight Dynamics System Software Development Environment (FDS/SDE) Tutorial*, J. Buell and P. Myers, July 1986

SEL-86-004, *Collected Software Engineering Papers: Volume IV*, November 1986

SEL-86-005, *Measuring Software Design*, D. N. Card et al., November 1986

SEL-86-006, *Proceedings of the Eleventh Annual Software Engineering Workshop*, December 1986

SEL-87-001, *Product Assurance Policies and Procedures for Flight Dynamics Software Development*, S. Perry et al., March 1987

SEL-87-002, *Ada[®] Style Guide (Version 1.1)*, E. Seidewitz et al., May 1987

SEL-87-003, *Guidelines for Applying the Composite Specification Model (CSM)*, W. W. Agresti, June 1987

SEL-87-004, *Assessing the Ada[®] Design Process and Its Implications: A Case Study*, S. Godfrey, C. Brophy, et al., July 1987

SEL-87-009, *Collected Software Engineering Papers: Volume V*, November 1987

SEL-87-010, *Proceedings of the Twelfth Annual Software Engineering Workshop*, December 1987

SEL-88-001, *System Testing of a Production Ada Project: The GRODY Study*, J. Seigle, L. Esker, and Y. Shi, November 1988

SEL-88-002, *Collected Software Engineering Papers: Volume VI*, November 1988

SEL-88-003, *Evolution of Ada Technology in the Flight Dynamics Area: Design Phase Analysis*, K. Quimby and L. Esker, December 1988

SEL-88-004, *Proceedings of the Thirteenth Annual Software Engineering Workshop*, November 1988

SEL-88-005, *Proceedings of the First NASA Ada User's Symposium*, December 1988

SEL-89-002, *Implementation of a Production Ada Project: The GRODY Study*, S. Godfrey and C. Brophy, September 1989

SEL-89-004, *Evolution of Ada Technology in the Flight Dynamics Area: Implementation/Testing Phase Analysis*, K. Quimby, L. Esker, L. Smith, M. Stark, and F. McGarry, November 1989

SEL-89-005, *Lessons Learned in the Transition to Ada From FORTRAN at NASA/Goddard*, C. Brophy, November 1989

SEL-89-006, *Collected Software Engineering Papers: Volume VII*, November 1989

SEL-89-007, *Proceedings of the Fourteenth Annual Software Engineering Workshop*, November 1989

SEL-89-008, *Proceedings of the Second NASA Ada Users' Symposium*, November 1989

SEL-89-103, *Software Management Environment (SME) Concepts and Architecture (Revision 1)*, R. Hendrick, D. Kistler, and J. Valett, September 1992

SEL-89-301, *Software Engineering Laboratory (SEL) Database Organization and User's Guide (Revision 3)*, L. Morusiewicz, February 1995

SEL-90-001, *Database Access Manager for the Software Engineering Laboratory (DAMSEL) User's Guide*, M. Buhler, K. Pumphrey, and D. Spiegel, March 1990

SEL-90-002, *The Cleanroom Case Study in the Software Engineering Laboratory: Project Description and Early Analysis*, S. Green et al., March 1990

SEL-90-003, *A Study of the Portability of an Ada System in the Software Engineering Laboratory (SEL)*, L. O. Jun and S. R. Valett, June 1990

SEL-90-004, *Gamma Ray Observatory Dynamics Simulator in Ada (GRODY) Experiment Summary*, T. McDermott and M. Stark, September 1990

SEL-90-005, *Collected Software Engineering Papers: Volume VIII*, November 1990

SEL-90-006, *Proceedings of the Fifteenth Annual Software Engineering Workshop*, November 1990

SEL-91-001, *Software Engineering Laboratory (SEL) Relationships, Models, and Management Rules*, W. Decker, R. Hendrick, and J. Valett, February 1991

SEL-91-003, *Software Engineering Laboratory (SEL) Ada Performance Study Report*, E. W. Booth and M. E. Stark, July 1991

SEL-91-004, *Software Engineering Laboratory (SEL) Cleanroom Process Model*, S. Green, November 1991

SEL-91-005, *Collected Software Engineering Papers: Volume IX*, November 1991

SEL-91-006, *Proceedings of the Sixteenth Annual Software Engineering Workshop*, December 1991

SEL-91-102, *Software Engineering Laboratory (SEL) Data and Information Policy (Revision 1)*, F. McGarry, August 1991

SEL-92-001, *Software Management Environment (SME) Installation Guide*, D. Kistler and K. Jeletic, January 1992

SEL-92-002, *Data Collection Procedures for the Software Engineering Laboratory (SEL) Database*, G. Heller, J. Valett, and M. Wild, March 1992

SEL-92-003, *Collected Software Engineering Papers: Volume X*, November 1992

SEL-92-004, *Proceedings of the Seventeenth Annual Software Engineering Workshop*, December 1992

SEL-93-001, *Collected Software Engineering Papers: Volume XI*, November 1993

SEL-93-002, *Cost and Schedule Estimation Study Report*, S. Condon, M. Regardie, M. Stark, et al., November 1993

SEL-93-003, *Proceedings of the Eighteenth Annual Software Engineering Workshop*, December 1993

SEL-94-001, *Software Management Environment (SME) Components and Algorithms*, R. Hendrick, D. Kistler, and J. Valett, February 1994

SEL-94-003, *C Style Guide*, J. Doland and J. Valett, August 1994

SEL-94-004, *Collected Software Engineering Papers: Volume XII*, November 1994

SEL-94-005, *An Overview of the Software Engineering Laboratory*, F. McGarry, G. Page, V. Basili, et al., December 1994

SEL-94-006, *Proceedings of the Nineteenth Annual Software Engineering Workshop*, December 1994

SEL-94-102, *Software Measurement Guidebook (Revision 1)*, M. Bassman, F. McGarry, R. Pajerski, June 1995

SEL-95-001, *Impact of Ada and Object-Oriented Design in the Flight Dynamics Division at Goddard Space Flight Center*, S. Waligora, J. Bailey, M. Stark, March 1995

SEL-95-003, *Collected Software Engineering Papers: Volume XIII*, November 1995

SEL-95-004, *Proceedings of the Twentieth Annual Software Engineering Workshop*, December 1995

SEL-95-102, *Software Process Improvement Guidebook (Revision 1)*, K. Jeletic, R. Pajerski, C. Brown, March 1996

SEL-RELATED LITERATURE

¹⁰Abd-El-Hafiz, S. K., V. R. Basili, and G. Caldiera, "Towards Automated Support for Extraction of Reusable Components," *Proceedings of the IEEE Conference on Software Maintenance-1991 (CSM 91)*, October 1991

⁴Agresti, W. W., V. E. Church, D. N. Card, and P. L. Lo, "Designing With Ada for Satellite Simulation: A Case Study," *Proceedings of the First International Symposium on Ada for the NASA Space Station*, June 1986

²Agresti, W. W., F. E. McGarry, D. N. Card, et al., "Measuring Software Technology," *Program Transformation and Programming Environments*. New York: Springer-Verlag, 1984

¹Bailey, J. W., and V. R. Basili, "A Meta-Model for Software Development Resource Expenditures," *Proceedings of the Fifth International Conference on Software Engineering*. New York: IEEE Computer Society Press, 1981

⁸Bailey, J. W., and V. R. Basili, "Software Reclamation: Improving Post-Development Reusability," *Proceedings of the Eighth Annual National Conference on Ada Technology*, March 1990

¹⁰Bailey, J. W., and V. R. Basili, "The Software-Cycle Model for Re-Engineering and Reuse," *Proceedings of the ACM Tri-Ada 91 Conference*, October 1991

¹Basili, V. R., "Models and Metrics for Software Management and Engineering," *ASME Advances in Computer Technology*, January 1980, vol. 1

Basili, V. R., *Tutorial on Models and Metrics for Software Management and Engineering*. New York: IEEE Computer Society Press, 1980 (also designated SEL-80-008)

- ³Basili, V. R., "Quantitative Evaluation of Software Methodology," *Proceedings of the First Pan-Pacific Computer Conference*, September 1985
- ⁷Basili, V. R., *Maintenance = Reuse-Oriented Software Development*, University of Maryland, Technical Report TR-2244, May 1989
- ⁷Basili, V. R., *Software Development: A Paradigm for the Future*, University of Maryland, Technical Report TR-2263, June 1989
- ⁸Basili, V. R., "Viewing Maintenance of Reuse-Oriented Software Development," *IEEE Software*, January 1990
- ¹³Basili, V. R., "The Experience Factory and Its Relationship to Other Quality Approaches," *Advances in Computers*, vol. 41, Academic Press, Incorporated, 1995
- ¹Basili, V. R., and J. Beane, "Can the Parr Curve Help With Manpower Distribution and Resource Estimation Problems?," *Journal of Systems and Software*, February 1981, vol. 2, no. 1
- ¹³Basili, V. R., L. Briand, and W. L. Melo, *A Validation of Object-Oriented Design Metrics*, University of Maryland, Computer Science Technical Report, CS-TR-3443, UMIACS-TR-95-40, April 1995
- ¹³Basili, V. R., and G. Caldiera, *The Experience Factory Strategy and Practice*, University of Maryland, Computer Science Technical Report, CS-TR-3483, UMIACS-TR-95-67, May 1995
- ⁹Basili, V. R., G. Caldiera, and G. Cantone, "A Reference Architecture for the Component Factory," *ACM Transactions on Software Engineering and Methodology*, January 1992
- ¹⁰Basili, V., G. Caldiera, F. McGarry, et al., "The Software Engineering Laboratory—An Operational Software Experience Factory," *Proceedings of the Fourteenth International Conference on Software Engineering (ICSE 92)*, May 1992
- ¹Basili, V. R., and K. Freburger, "Programming Measurement and Estimation in the Software Engineering Laboratory," *Journal of Systems and Software*, February 1981, vol. 2, no. 1
- ¹²Basili, V. R., and S. Green, "Software Process Evolution at the SEL," *IEEE Software*, July 1994, pp. 58–66
- ³Basili, V. R., and N. M. Panlilio-Yap, "Finding Relationships Between Effort and Other Variables in the SEL," *Proceedings of the International Computer Software and Applications Conference*, October 1985
- ⁴Basili, V. R., and D. Patnaik, *A Study on Fault Prediction and Reliability Assessment in the SEL Environment*, University of Maryland, Technical Report TR-1699, August 1986
- ²Basili, V. R., and B. T. Perricone, "Software Errors and Complexity: An Empirical Investigation," *Communications of the ACM*, January 1984, vol. 27, no. 1

¹Basili, V. R., and T. Phillips, "Evaluating and Comparing Software Metrics in the Software Engineering Laboratory," *Proceedings of the ACM SIGMETRICS Symposium/Workshop: Quality Metrics*, March 1981

³Basili, V. R., and C. L. Ramsey, "ARROWSMITH-P—A Prototype Expert System for Software Engineering Management," *Proceedings of the IEEE/MITRE Expert Systems in Government Symposium*, October 1985

Basili, V. R., and J. Ramsey, *Structural Coverage of Functional Testing*, University of Maryland, Technical Report TR-1442, September 1984

Basili, V. R., and R. Reiter, "Evaluating Automatable Measures for Software Development," *Proceedings of the Workshop on Quantitative Software Models for Reliability, Complexity, and Cost*. New York: IEEE Computer Society Press, 1979

⁵Basili, V. R., and H. D. Rombach, "Tailoring the Software Process to Project Goals and Environments," *Proceedings of the 9th International Conference on Software Engineering*, March 1987

⁵Basili, V. R., and H. D. Rombach, "TAME: Tailoring an Ada Measurement Environment," *Proceedings of the Joint Ada Conference*, March 1987

⁵Basili, V. R., and H. D. Rombach, "TAME: Integrating Measurement Into Software Environments," University of Maryland, Technical Report TR-1764, June 1987

⁶Basili, V. R., and H. D. Rombach, "The TAME Project: Towards Improvement-Oriented Software Environments," *IEEE Transactions on Software Engineering*, June 1988

⁷Basili, V. R., and H. D. Rombach, *Towards A Comprehensive Framework for Reuse: A Reuse-Enabling Software Evolution Environment*, University of Maryland, Technical Report TR-2158, December 1988

⁸Basili, V. R., and H. D. Rombach, *Towards A Comprehensive Framework for Reuse: Model-Based Reuse Characterization Schemes*, University of Maryland, Technical Report TR-2446, April 1990

⁹Basili, V. R., and H. D. Rombach, "Support for Comprehensive Reuse," *Software Engineering Journal*, September 1991

³Basili, V. R., and R. W. Selby, Jr., "Calculation and Use of an Environment's Characteristic Software Metric Set," *Proceedings of the Eighth International Conference on Software Engineering*. New York: IEEE Computer Society Press, 1985

Basili, V. R., and R. W. Selby, "Comparing the Effectiveness of Software Testing Strategies," *IEEE Transactions on Software Engineering*, December 1987

³Basili, V. R., and R. W. Selby, Jr., "Four Applications of a Software Data Collection and Analysis Methodology," *Proceedings of the NATO Advanced Study Institute*, August 1985

- ⁵Basili, V. R., and R. Selby, "Comparing the Effectiveness of Software Testing Strategies," *IEEE Transactions on Software Engineering*, December 1987
- ⁹Basili, V. R., and R. W. Selby, "Paradigms for Experimentation and Empirical Studies in Software Engineering," *Reliability Engineering and System Safety*, January 1991
- ⁴Basili, V. R., R. W. Selby, Jr., and D. H. Hutchens, "Experimentation in Software Engineering," *IEEE Transactions on Software Engineering*, July 1986
- ²Basili, V. R., R. W. Selby, and T. Phillips, "Metric Analysis and Data Validation Across FORTRAN Projects," *IEEE Transactions on Software Engineering*, November 1983
- ²Basili, V. R., and D. M. Weiss, *A Methodology for Collecting Valid Software Engineering Data*, University of Maryland, Technical Report TR-1235, December 1982
- ³Basili, V. R., and D. M. Weiss, "A Methodology for Collecting Valid Software Engineering Data," *IEEE Transactions on Software Engineering*, November 1984
- ¹Basili, V. R., and M. V. Zelkowitz, "The Software Engineering Laboratory: Objectives," *Proceedings of the Fifteenth Annual Conference on Computer Personnel Research*, August 1977
- Basili, V. R., and M. V. Zelkowitz, "Designing a Software Measurement Experiment," *Proceedings of the Software Life Cycle Management Workshop*, September 1977
- ¹Basili, V. R., and M. V. Zelkowitz, "Operation of the Software Engineering Laboratory," *Proceedings of the Second Software Life Cycle Management Workshop*, August 1978
- ¹Basili, V. R., and M. V. Zelkowitz, "Measuring Software Development Characteristics in the Local Environment," *Computers and Structures*, August 1978, vol. 10
- Basili, V. R., and M. V. Zelkowitz, "Analyzing Medium Scale Software Development," *Proceedings of the Third International Conference on Software Engineering*. New York: IEEE Computer Society Press, 1978
- ¹³Basili, V., M. Zelkowitz, F. McGarry, G. Page, S. Waligora, and R. Pajerski, "SEL's Software Process-Improvement Program," *IEEE Software*, vol. 12, no. 6, November 1995, pp. 83–87
- Bassman, M. J., F. McGarry, and R. Pajerski, *Software Measurement Guidebook*, NASA-GB-001-94, Software Engineering Program, July 1994
- ⁹Booth, E. W., and M. E. Stark, "Designing Configurable Software: COMPASS Implementation Concepts," *Proceedings of Tri-Ada 1991*, October 1991
- ¹⁰Booth, E. W., and M. E. Stark, "Software Engineering Laboratory Ada Performance Study—Results and Implications," *Proceedings of the Fourth Annual NASA Ada User's Symposium*, April 1992

- ¹⁰Briand, L. C., and V. R. Basili, "A Classification Procedure for the Effective Management of Changes During the Maintenance Process," *Proceedings of the 1992 IEEE Conference on Software Maintenance (CSM 92)*, November 1992
- ¹⁰Briand, L. C., V. R. Basili, and C. J. Hetmanski, "Providing an Empirical Basis for Optimizing the Verification and Testing Phases of Software Development," *Proceedings of the Third IEEE International Symposium on Software Reliability Engineering (ISSRE 92)*, October 1992
- ¹¹Briand, L. C., V. R. Basili, and C. J. Hetmanski, *Developing Interpretable Models with Optimized Set Reduction for Identifying High Risk Software Components*, University of Maryland, Technical Report TR-3048, March 1993
- ¹²Briand, L. C., V. R. Basili, Y. Kim, and D. R. Squier, "A Change Analysis Process to Characterize Software Maintenance Projects," *Proceedings of the International Conference on Software Maintenance*, Victoria, British Columbia, Canada, September 19–23, 1994, pp. 38–49
- ⁹Briand, L. C., V. R. Basili, and W. M. Thomas, *A Pattern Recognition Approach for Software Engineering Data Analysis*, University of Maryland, Technical Report TR-2672, May 1991
- ¹³Briand, L., W. Melo, C. Seaman, and V. Basili, "Characterizing and Assessing a Large-Scale Software Maintenance Organization," *Proceedings of the 17th International Conference on Software Engineering*, Seattle, Washington, U.S.A., April 23–30, 1995
- ¹¹Briand, L. C., S. Morasca, and V. R. Basili, "Measuring and Assessing Maintainability at the End of High Level Design," *Proceedings of the 1993 IEEE Conference on Software Maintenance (CSM 93)*, November 1993
- ¹²Briand, L., S. Morasca, and V. R. Basili, *Defining and Validating High-Level Design Metrics*, University of Maryland, Computer Science Technical Report, CS-TR-3301, UMIACS-TR-94-75, June 1994
- ¹³Briand, L., S. Morasca, and V. R. Basili, *Property-based Software Engineering Measurement*, University of Maryland, Computer Science Technical Report, CS-TR-3368, UMIACS-TR-94-119, November 1994
- ¹³Briand, L., S. Morasca, and V. R. Basili, *Goal-Driven Definition of Product Metrics Based on Properties*, University of Maryland, Computer Science Technical Report, CS-TR-3346, UMIACS-TR-94-106, December 1994
- ¹¹Briand, L. C., W. M. Thomas, and C. J. Hetmanski, "Modeling and Managing Risk Early in Software Development," *Proceedings of the Fifteenth International Conference on Software Engineering (ICSE 93)*, May 1993
- ⁵Brophy, C. E., W. W. Agresti, and V. R. Basili, "Lessons Learned in Use of Ada-Oriented Design Methods," *Proceedings of the Joint Ada Conference*, March 1987

⁶Brophy, C. E., S. Godfrey, W. W. Agresti, and V. R. Basili, "Lessons Learned in the Implementation Phase of a Large Ada Project," *Proceedings of the Washington Ada Technical Conference*, March 1988

²Card, D. N., "Early Estimation of Resource Expenditures and Program Size," Computer Sciences Corporation, Technical Memorandum, June 1982

²Card, D. N., "Comparison of Regression Modeling Techniques for Resource Estimation," Computer Sciences Corporation, Technical Memorandum, November 1982

³Card, D. N., "A Software Technology Evaluation Program," *Anais do XVIII Congresso Nacional de Informatica*, October 1985

⁵Card, D. N., and W. W. Agresti, "Resolving the Software Science Anomaly," *Journal of Systems and Software*, 1987

⁶Card, D. N., and W. W. Agresti, "Measuring Software Design Complexity," *Journal of Systems and Software*, June 1988

⁴Card, D. N., V. E. Church, and W. W. Agresti, "An Empirical Study of Software Design Practices," *IEEE Transactions on Software Engineering*, February 1986

Card, D. N., V. E. Church, W. W. Agresti, and Q. L. Jordan, "A Software Engineering View of Flight Dynamics Analysis System," Parts I and II, Computer Sciences Corporation, Technical Memorandum, February 1984

Card, D. N., Q. L. Jordan, and V. E. Church, "Characteristics of FORTRAN Modules," Computer Sciences Corporation, Technical Memorandum, June 1984

⁵Card, D. N., F. E. McGarry, and G. T. Page, "Evaluating Software Engineering Technologies," *IEEE Transactions on Software Engineering*, July 1987

³Card, D. N., G. T. Page, and F. E. McGarry, "Criteria for Software Modularization," *Proceedings of the Eighth International Conference on Software Engineering*. New York: IEEE Computer Society Press, 1985

¹Chen, E., and M. V. Zelkowitz, "Use of Cluster Analysis To Evaluate Software Engineering Methodologies," *Proceedings of the Fifth International Conference on Software Engineering*. New York: IEEE Computer Society Press, 1981

⁴Church, V. E., D. N. Card, W. W. Agresti, and Q. L. Jordan, "An Approach for Assessing Software Prototypes," *ACM Software Engineering Notes*, July 1986

²Doerflinger, C. W., and V. R. Basili, "Monitoring Software Development Through Dynamic Variables," *Proceedings of the Seventh International Computer Software and Applications Conference*. New York: IEEE Computer Society Press, 1983

Doubleday, D., *ASAP: An Ada Static Source Code Analyzer Program*, University of Maryland, Technical Report TR-1895, August 1987 (NOTE: 100 pages long)

⁶Godfrey, S., and C. Brophy, "Experiences in the Implementation of a Large Ada Project," *Proceedings of the 1988 Washington Ada Symposium*, June 1988

⁵Jeffery, D. R., and V. Basili, *Characterizing Resource Data: A Model for Logical Association of Software Data*, University of Maryland, Technical Report TR-1848, May 1987

⁶Jeffery, D. R., and V. R. Basili, "Validating the TAME Resource Data Model," *Proceedings of the Tenth International Conference on Software Engineering*, April 1988

¹¹Li, N. R., and M. V. Zelkowitz, "An Information Model for Use in Software Management Estimation and Prediction," *Proceedings of the Second International Conference on Information Knowledge Management*, November 1993

⁵Mark, L., and H. D. Rombach, *A Meta Information Base for Software Engineering*, University of Maryland, Technical Report TR-1765, July 1987

⁶Mark, L., and H. D. Rombach, "Generating Customized Software Engineering Information Bases From Software Process and Product Specifications," *Proceedings of the 22nd Annual Hawaii International Conference on System Sciences*, January 1989

⁵McGarry, F. E., and W. W. Agresti, "Measuring Ada for Software Development in the Software Engineering Laboratory (SEL)," *Proceedings of the 21st Annual Hawaii International Conference on System Sciences*, January 1988

⁷McGarry, F., L. Esker, and K. Quimby, "Evolution of Ada Technology in a Production Software Environment," *Proceedings of the Sixth Washington Ada Symposium (WADAS)*, June 1989

McGarry, F., R. Pajerski, G. Page, et al., *Software Process Improvement in the NASA Software Engineering Laboratory*, Carnegie-Mellon University, Software Engineering Institute, Technical Report CMU/SEI-94-TR-22, ESC-TR-94-022, December 1994

³McGarry, F. E., J. Valett, and D. Hall, "Measuring the Impact of Computer Resource Quality on the Software Development Process and Product," *Proceedings of the Hawaiian International Conference on System Sciences*, January 1985

³Page, G., F. E. McGarry, and D. N. Card, "A Practical Experience With Independent Verification and Validation," *Proceedings of the Eighth International Computer Software and Applications Conference*, November 1984

¹²Porter, A. A., L. G. Votta, Jr., and V. R. Basili, *Comparing Detection Methods for Software Requirements Inspections: A Replicated Experiment*, University of Maryland, Technical Report TR-3327, July 1994

⁵Ramsey, C. L., and V. R. Basili, "An Evaluation of Expert Systems for Software Engineering Management," *IEEE Transactions on Software Engineering*, June 1989

- ³Ramsey, J., and V. R. Basili, "Analyzing the Test Process Using Structural Coverage," *Proceedings of the Eighth International Conference on Software Engineering*. New York: IEEE Computer Society Press, 1985
- ⁵Rombach, H. D., "A Controlled Experiment on the Impact of Software Structure on Maintainability," *IEEE Transactions on Software Engineering*, March 1987
- ⁸Rombach, H. D., "Design Measurement: Some Lessons Learned," *IEEE Software*, March 1990
- ⁹Rombach, H. D., "Software Reuse: A Key to the Maintenance Problem," *Butterworth Journal of Information and Software Technology*, January/February 1991
- ⁶Rombach, H. D., and V. R. Basili, "Quantitative Assessment of Maintenance: An Industrial Case Study," *Proceedings From the Conference on Software Maintenance*, September 1987
- ⁶Rombach, H. D., and L. Mark, "Software Process and Product Specifications: A Basis for Generating Customized SE Information Bases," *Proceedings of the 22nd Annual Hawaii International Conference on System Sciences*, January 1989
- ⁷Rombach, H. D., and B. T. Ulery, *Establishing a Measurement Based Maintenance Improvement Program: Lessons Learned in the SEL*, University of Maryland, Technical Report TR-2252, May 1989
- ¹⁰Rombach, H. D., B. T. Ulery, and J. D. Valett, "Toward Full Life Cycle Control: Adding Maintenance Measurement to the SEL," *Journal of Systems and Software*, May 1992
- ⁶Seidewitz, E., "Object-Oriented Programming in Smalltalk and Ada," *Proceedings of the 1987 Conference on Object-Oriented Programming Systems, Languages, and Applications*, October 1987
- ⁵Seidewitz, E., "General Object-Oriented Software Development: Background and Experience," *Proceedings of the 21st Hawaii International Conference on System Sciences*, January 1988
- ⁶Seidewitz, E., "General Object-Oriented Software Development with Ada: A Life Cycle Approach," *Proceedings of the CASE Technology Conference*, April 1988
- ⁹Seidewitz, E., "Object-Oriented Programming Through Type Extension in Ada 9X," *Ada Letters*, March/April 1991
- ¹⁰Seidewitz, E., "Object-Oriented Programming With Mixins in Ada," *Ada Letters*, March/April 1992
- ¹²Seidewitz, E., "Genericity versus Inheritance Reconsidered: Self-Reference Using Generics," *Proceedings of the Conference on Object-Oriented Programming Systems, Languages, and Applications*, October 1994
- ⁴Seidewitz, E., and M. Stark, "Towards a General Object-Oriented Software Development Methodology," *Proceedings of the First International Symposium on Ada for the NASA Space Station*, June 1986

- ⁹Seidewitz, E., and M. Stark, "An Object-Oriented Approach to Parameterized Software in Ada," *Proceedings of the Eighth Washington Ada Symposium*, June 1991
- ⁸Stark, M., "On Designing Parametrized Systems Using Ada," *Proceedings of the Seventh Washington Ada Symposium*, June 1990
- ¹¹Stark, M., "Impacts of Object-Oriented Technologies: Seven Years of SEL Studies," *Proceedings of the Conference on Object-Oriented Programming Systems, Languages, and Applications*, September 1993
- ⁷Stark, M. E. and E. W. Booth, "Using Ada to Maximize Verbatim Software Reuse," *Proceedings of TRI-Ada 1989*, October 1989
- ⁵Stark, M., and E. Seidewitz, "Towards a General Object-Oriented Ada Lifecycle," *Proceedings of the Joint Ada Conference*, March 1987
- ¹³Stark, M., and E. Seidewitz, "Generalized Support Software: Domain Analysis and Implementation," *Addendum to the Proceedings OOPSLA '94*, Ninth Annual Conference, Portland, Oregon, U.S.A., October 1994, pp. 8–13
- ¹⁰Straub, P. A., and M. V. Zelkowitz, "On the Nature of Bias and Defects in the Software Specification Process," *Proceedings of the Sixteenth International Computer Software and Applications Conference (COMPSAC 92)*, September 1992
- ⁸Straub, P. A., and M. V. Zelkowitz, "PUC: A Functional Specification Language for Ada," *Proceedings of the Tenth International Conference of the Chilean Computer Science Society*, July 1990
- ⁷Sunazuka, T., and V. R. Basili, *Integrating Automated Support for a Software Management Cycle Into the TAME System*, University of Maryland, Technical Report TR-2289, July 1989
- ¹³Thomas, W. M., A. Delis, and V. R. Basili, *An Analysis of Errors in a Reuse-Oriented Development Environment*, University of Maryland, Computer Science Technical Report, CS-TR-3424, UMIACS-TR-95-24, February 1995
- ¹⁰Tian, J., A. Porter, and M. V. Zelkowitz, "An Improved Classification Tree Analysis of High Cost Modules Based Upon an Axiomatic Definition of Complexity," *Proceedings of the Third IEEE International Symposium on Software Reliability Engineering (ISSRE 92)*, October 1992
- Turner, C., and G. Caron, *A Comparison of RAD and NASA/SEL Software Development Data*, Data and Analysis Center for Software, Special Publication, May 1981
- ¹⁰Valett, J. D., "Automated Support for Experience-Based Software Management," *Proceedings of the Second Irvine Software Symposium (ISS _92)*, March 1992
- ⁵Valett, J. D., and F. E. McGarry, "A Summary of Software Measurement Experiences in the Software Engineering Laboratory," *Proceedings of the 21st Annual Hawaii International Conference on System Sciences*, January 1988

³Weiss, D. M., and V. R. Basili, "Evaluating Software Development by Analysis of Changes: Some Data From the Software Engineering Laboratory," *IEEE Transactions on Software Engineering*, February 1985

⁵Wu, L., V. R. Basili, and K. Reed, "A Structure Coverage Tool for Ada Software Systems," *Proceedings of the Joint Ada Conference*, March 1987

¹Zelkowitz, M. V., "Resource Estimation for Medium-Scale Software Projects," *Proceedings of the Twelfth Conference on the Interface of Statistics and Computer Science*. New York: IEEE Computer Society Press, 1979

²Zelkowitz, M. V., "Data Collection and Evaluation for Experimental Computer Science Research," *Empirical Foundations for Computer and Information Science* (Proceedings), November 1982

⁶Zelkowitz, M. V., "The Effectiveness of Software Prototyping: A Case Study," *Proceedings of the 26th Annual Technical Symposium of the Washington, D.C., Chapter of the ACM*, June 1987

⁶Zelkowitz, M. V., "Resource Utilization During Software Development," *Journal of Systems and Software*, 1988

⁸Zelkowitz, M. V., "Evolution Towards Specifications Environment: Experiences With Syntax Editors," *Information and Software Technology*, April 1990

NOTES:

¹This article also appears in SEL-82-004, *Collected Software Engineering Papers: Volume I*, July 1982.

²This article also appears in SEL-83-003, *Collected Software Engineering Papers: Volume II*, November 1983.

³This article also appears in SEL-85-003, *Collected Software Engineering Papers: Volume III*, November 1985.

⁴This article also appears in SEL-86-004, *Collected Software Engineering Papers: Volume IV*, November 1986.

⁵This article also appears in SEL-87-009, *Collected Software Engineering Papers: Volume V*, November 1987.

⁶This article also appears in SEL-88-002, *Collected Software Engineering Papers: Volume VI*, November 1988.

⁷This article also appears in SEL-89-006, *Collected Software Engineering Papers: Volume VII*, November 1989.

⁸This article also appears in SEL-90-005, *Collected Software Engineering Papers: Volume VIII*, November 1990.

⁹This article also appears in SEL-91-005, *Collected Software Engineering Papers: Volume IX*, November 1991.

¹⁰This article also appears in SEL-92-003, *Collected Software Engineering Papers: Volume X*, November 1992.

¹¹This article also appears in SEL-93-001, *Collected Software Engineering Papers: Volume XI*, November 1993.

¹²This article also appears in SEL-94-004, *Collected Software Engineering Papers: Volume XII*, November 1994.

¹³This article also appears in SEL-95-003, *Collected Software Engineering Papers: Volume XIII*, November 1995.